

22. (Once Amended) The method of claim 21, wherein the step of
b3 inducing the release of the residual stresses in the investigation area includes
applying an electric current pulse to the investigation area.

REMARKS

Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the following remarks. No claims have been added or deleted by this addendum. Therefore, claims 1-29 remain pending. Claims 1, 5, 10, 20, and 24 are independent. The objections and rejections of the Office Action have been addressed in the Reply.

It is respectfully submitted that the present application is in condition for allowance and such allowance is respectfully solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Hyung Sohn (Reg. No. 44,346), to conduct an interview in an effort to expedite prosecution in connection with the present application.

Attached hereto is a marked-up version of the changes made to the application by this Reply.

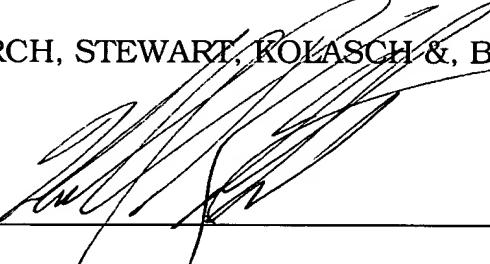
If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit

Appln. No. 09/717,306

Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16
or 1. 17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By: 

Michael K. Mutter, Reg. No. 29,680

MKM/HNS
(703) 205-8000

P.O. Box 747
Falls Church, VA 22040-0747



Appln. No. 09/717,306

VERSION WITH MARKINGS TO SHOW CHANGES MADE

RECEIVED
TECHNOLOGY CENTER 2800
MAR 26 2003

IN THE CLAIMS

Please amend the following claims.

3. (Three Times Amended) The method according to claim 1, wherein the step of subjecting the small region of the investigation area of the object to the [non-destructive dislocation] release of the residual stress includes exposing the investigation area of the object to a electric current pulse.

10. (Once Amended) A device for performing [non-destructive real-time] measurements of residual stresses of an object, comprising:

a control unit, wherein the control unit is configured to generate coherent light and split the coherent light into a reference beam and an object beam;

a probe connected to the control unit by a first light guidance cable, wherein the probe is configured to receive the object beam from the control unit, illuminate an investigation area of an object with the object beam, collect a reflected object beam from the investigation area, and induce a release of the residual stresses in the investigation area; and

a holographic camera connected to the control unit by a second light guidance cable and connected to the probe by a third light guidance cable,

wherein the holographic camera is arranged to receive the reference beam from the control unit, receive the reflected object beam from the probe, generate a hologram based on the reference beam and the reflected object beam, and generate an interferogram of the investigation area where in the probe is movable with respect to the control unit.

22. (Once Amended) The method of claim 21, wherein the step of inducing the [non-destructive dislocation] release of the residual stresses in the investigation area includes applying an electric current pulse to the investigation area.